

What is claimed is:

1. A carrier for cell culture which comprises a carrier having a cationic group and polypeptide-modified portions formed on a surface of the carrier in a sea-island structure.

2. The carrier for cell culture according to claim 1, wherein the carrier is a polymer compound, an inorganic compound, or an organic compound.

3. The carrier for cell culture according to claim 1, wherein the carrier is glass.

4. The carrier for cell culture according to claim 1, wherein the carrier is a water-containing polymer gel.

5. The carrier for cell culture according to claim 4, wherein the carrier is a water-containing anionic polymer gel.

6. The carrier for cell culture according to claim 5, wherein the carrier having a cationic group is a water-containing gel comprising a water-containing anionic polymer gel added with chitosan or a water-containing gel comprising a water-containing anionic polymer gel adsorbed with chitosan.

7. The carrier for cell culture according to claims 1, wherein the polypeptide is a cell-adhesive polypeptide.

8. The carrier for cell culture according to claim 8, wherein the polypeptide-modified portion is formed with an aqueous gel containing an extracellular matrix component.

9. The carrier for cell culture according to claim 1, wherein one independent polypeptide-modified portion has an area of from $50 \mu\text{m}^2$ to 2mm^2 .

10. A method for cell culture which comprises the step of inoculating cells on a surface of the carrier for cell culture according to claim 1.

11. A Cell culture obtained by the method according to claim 10.

12. A carrier for cell culture comprising a water-containing gel comprising alginic acid, wherein a surface of the carrier is coated with collagen, and wherein the collagen is bound to a surface of the water-containing gel by means of chitosan.

13. The carrier for cell culture according to claim 12, wherein the water-containing gel contains calcium alginate gel or alginic acid/polylysine gel.

14. The carrier for cell culture according to claim 12, wherein the binding by means of chitosan is a binding between a collagen layer and a surface of the

water-containing gel intermediated by a chitosan layer.

15. The carrier for cell culture according to claim 12, wherein the water-containing gel is formed on a porous membrane.

16. A method for producing the carrier for cell culture according to claim 12, which comprises the step of successively immersing a water-containing gel comprising alginic acid in a chitosan solution and then in a collagen solution.

17. A method for culturing cells, which comprises the step of allowing cells to form a cell layer on the carrier for cell culture according to claim 12.

18. A cell culture obtained by the method according to claim 17.

19. A method for producing cell culture, which comprises the step of allowing cells to form a cell layer on a surface of the carrier for cell culture according to claim 12 and the step of solubilizing the water-containing gel comprising alginic acid.

20. A cell culture obtained by the method according to claim 19.